

REMARKS

Claims 1-16 are pending in the present application. Claims 1-16 were rejected under 35 U.S.C. §103(a) as being obvious over U.S. Patent No. 6,912,489 (Luitweiler, et al.) in view of U.S. Patent No. 6,741,245 (Marks, et al.).

Applicant respectfully traverses these rejections.

Applicant urges that independent claims 1, 13, and 15 are not obvious over Luitweiler in view of Marks for at least the reasons presented herein below.

At the very least, Luitweiler does not disclose or suggest a system and method for room planning and design that recites, e.g., *a first user interface component for selecting said virtual object from said virtual library and positioning them in said virtual room space; a second user interface component for manipulating the positions and orientations of said virtual objects within said virtual room space; a workspace comprising a physical model of said physical room space*, as essentially recited in claims 1, 13 and 15.

Luitweiler discloses a computer system for simulating images of a building, in which requirements for a building are input into a computer program, which determines a layout of spaces that satisfy the requirements, and produces a 3-dimensional model of the building. (Abstract, col. 4, ll. 12-28.) Lutweiler describes the data structures used to specify the layout of the building and for constructing a simulation model of the building. (Col. 6, l. 29 to Col.10, l. 56.) The system includes a drawing design program that can display the model of the building on a presentation means, such as a printer, plotter, video, or means for generating virtual reality images. (Col. 6, ll. 52-54, col. 10, ll. 57-

67.) However, even though the word “physical” is used to describe what is modeled, (Col. 6, ll. 34 and 39,) along with the phrase “actual components” (col. 4, l. 25), there is no disclosure or suggestion in Lutweiler of a *physical model of a physical room space*, as essentially claimed in claims 1, 13, and 15. The disclosure of the drawing design program and the list of devices for displaying the 3-dimensional model of the building all indicate that the 3-dimensional model is a virtual model, a representation in software of a 3-dimensional object in a 3-dimensional space. (See also col. 5, ll. 33-46.) The use of the word “physical” or “actual components” in this context refers instead to the subject matter of the virtual model. There is no disclosure or suggestion in Lutweiler of a *workspace comprising a physical model of said physical room space*, nor does a virtual model suggest a physical model.

In addition, there is no disclosure or suggestion in Lutweiler of a *first user interface component for selecting said virtual object from said virtual library and positioning them in said virtual room space*, nor of a *second user interface component for manipulating the positions and orientations of said virtual objects within said virtual room space*. Although Lutweiler does disclose an interactive program (col. 4, ll. 39-46), Lutweiler does not disclose any details of the user interface for this interactive program, such as *first user interface component* or a *second user interface component*. In addition, although Lutweiler disclose inputting building specifications into a computer program, (Col. 5, l. 65 to Col. 6, l. 12), including selecting objects from a utility space library (Col. 6, l. 60 to Col. 7, l. 7), there is no disclosure or suggestion of *an interface component for manipulating position and orientation of said virtual objects within said virtual room space*, as essentially claimed in claims 1, 13, and 15.

The Action cited Marks as disclosing “physical marker objects substantially scaled to said workspace for manual placement and orientation of said markers objects in said workspace”, as essentially recited in claims 1, 13, and 15. Marks is directed to an object modeling system comprising building blocks containing micro-controllers that can self-describe the geometric structures into which they are assembled. (Col. 2, ll. 35-45.) Each block is covered with connectors that can transmit data signals to a host computer, which can recover the structure of the blocks. (Col. 2, ll. 50-65.) However, at the very least, Marks does not disclose or suggest *a first user interface component for selecting said virtual object from said virtual library and positioning them in said virtual room space; a second user interface component for manipulating the positions and orientations of said virtual objects within said virtual room space; a workspace comprising a physical model of said physical room space*, as essentially claimed in claims 1, 13, and 15. Thus, Marks does not rectify the deficiencies of Luitweiler, and the combination of Lutweiler and Marks does not teach or suggest all of the limitations of claim 1.

Furthermore, Applicant urges that there is no motivation to combine the teachings of Lutweiler with those of Marks. The object modeling system of Marks is directed to modeling the structure of a building, not for planning a room, such as selecting objects to be placed in a room or for manipulating the position and orientations of objects in a room. The host computer in Marks determines the orientation of a block by its connections to other blocks. This system is unsuitable to detecting the orientation and placement of free standing objects in a room that lack connectors to other objects in the room. There is thus no suggestion or motivation in Marks that the building blocks

disclosed therein can be successfully combined with the building simulation system of Lutweiler to produce Applicant's room planning and design system.

For the reasons presented above, Applicant urges that there is no motivation to combine the teachings of Lutweiler and Marks, nor is there any reasonable expectation that these teaching can be successfully combined. Further, Applicant urges that the combination of Lutweiler and Marks does not disclose or suggest all of the limitations of claims 1, 13, and 15. Thus, Applicant urges that a *prima facie* case of obviousness of claims 1, 13 and 15 over Lutweiler in view of Marks cannot be maintained. Reconsideration and withdrawal of these section 103 rejections are respectfully requested.


Claims 2-12 depend from claim 1 and are thus patentable for at least the same reasons as claim 1. Claims 14 and 16 depend from claims 13 and 15, respectively, and are thus patentable for at least the same reasons as claims 13 and 15. Reconsideration and withdrawal of these rejections are respectfully requested.

CONCLUSION

Applicant urges that claims 1-16 are in condition for allowance for at least the reasons stated. Early and favorable action on this case is respectfully requested.

Respectfully submitted,

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